

# Plant Guide



### **MARIPOSA LILY**

## Calochortus superbus Purdy ex J.T. Howell

plant symbol = CASU3

Contributed by: USDA, NRCS, National Plant Data Center



Alfred Brousseau © Brother Eric Vogel, St. Mary's College @ CalPhotos

#### **Alternate Names**

Butterfly Mariposa, Mariposa tulip, white Mariposa (Note: mariposa is Spanish for butterfly)

#### Uses

Ethnobotanic: The sweet bulbs of this plant were eaten raw, roasted in ashes, boiled, or baked in an earth oven and relished by many tribes in California including the Pomo, Yuki, Sierra Miwok, Kawaiisu, Wappo, Tubatulabal, Foothill Yokuts, and Wailaki. The Sierra Miwok dug the bulbs in April when buds appeared or after flowering, while the Wukchumni Yokuts dug the plants in bloom about April or May. The bulbs were rubbed across an open-twined basket to remove the outer skin by some tribes. They were reputed to grow in "great tracts" on open hillsides in Mendocino County, California in the early 1900's. They were harvested with a digging stick and eaten within four or five days, as they do not store well.

#### Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status and wetland indicator values.

#### **Description**

General: Lily Family (Liliaceae). Calochortus venustus and Calochortus superbus have overlapping distributions and are hard to tell apart. They also were not separated as two distinct species in the first half of the 20th century when anthropologists were doing their fieldwork among tribes. Therefore, it is highly likely that tribes dug the bulbs of populations of both species. The large showy flowers of Calochortus venustus range from white, yellow, purple, to dark red, and have a red-brown eyespot above the gland on the inside of each petal. Sometimes there is a paler blotch above the first. The base of the plant is bulblet-bearing. The erect stems are branched and 1 to 6-flowered. The linear leaves are basal and 1-2 dm long. The fruit is erect, 5-6 cm, linear and angled.

The main identifying features that distinguish Calochortus superbus from Calochortus venustus is the nectary. On Calochortus venustus it is square, while on Calochortus superbus it is crescent or chevron-shaped. Another difference is that the petals on Calochortus venustus sometimes have a second distal, paler spot, while with Calochortus superbus the petal spot is always one, generally in the yellow zone.

#### Distribution

For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site. *Calochortus superbus* is found in open grassland, oak woodland, dry meadows, and mixed conifer forests below 1700 m in northwestern California, the Cascade Range foothills, central western California, the Sierra Nevada foothills, and southwestern California.

#### Establishment

Collect or buy seed from local sources. Place the seeds in a paper bag until you are ready to plant them. Plant them in a 5 inch or deeper pot in a soil that has excellent drainage. Scatter the seeds at least one-quarter inch apart. Sprinkle a light layer of soil on top and then place quarter-inch gravel on top of the soil. The seeds should be planted in the fall and require no stratification. Let the pots sit outside during the winter in partial shade. Water the pots, keeping them slightly damp (if rains are insufficient). Germination is generally about February. Fertilize the plants in a weak solution about once a month during active growth until April. When the tips of the leaves turn yellow, stop watering and fertilizing

(about the end of April). The bulbs are dormant during flowering. In the fall start watering again. Give the plants more room in the fall of the second or third year by transplanting them and spacing them 1-2 inches apart. Plant the plants outside in the ground in the third or fourth year. Plant them in full sun in summer or fall. Start watering them in September. After they have bloomed for the first time, they should be established.

#### Management

Weed around the plants regularly and protect them from insects, birds, mammals, and other animals.

# Cultivars, Improved and Selected Materials (and area of origin)

CASU3 is somewhat available through native plant nurseries and seed companies within its range. Please check the Vendor Database, expected to be on-line through the PLANTS Web site in 2001 by clicking on Plant Materials.

#### References

Barrett, S.A. & E.W. Gifford. 1933. *Miwok material culture*. Bulletin of the Public Museum of the City of Milwaukee 2(4):117-376.

Chesnut, V.K. 1902. *Plants used by the Indians of Mendocino County, California*. Contributions from the U.S. National Herbarium Vol. VII. Reprinted by the Mendocino County Historical Society in 1974.

Fiedler, P. & B. Ness. *Calochortus*. pp. 1183-1189 IN: The Jepson Manual: Higher Plants of California. J.C. Hickman (ed.). University of California Press, Berkeley, California.

Gayton, A.H. 1948. Yokuts and Western Mono ethnography I: Tulare Lake, Southern Valley, and Central Foothill Yokuts. University of California Press, Berkeley and Los Angeles, California. 144 pp.

Voegelin, E.W. 1938. *Tubatulabal ethnography*. Anthropological Records Vol 2:(1):1-84.

Zigmond, M.L. 1981. *Kawaiisu ethnobotany*. University of Utah Press. Salt Lake City, Utah.

#### **Prepared By & Species Coordinators**

M. Kat Anderson USDA, NRCS, National Plant Data Center c/o Environmental Horticulture Department, University of California, Davis, California Wayne Roderick
Former Director of the East Bay Regional Parks
Botanic Garden, Berkeley, California

Edited: 05dec00 jsp

For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS <a href="http://plants.usda.gov">http://plants.usda.gov</a> and Plant Materials Program Web sites <a href="http://Plant-Materials.nrcs.usda.gov">http://Plant-Materials.nrcs.usda.gov</a>>.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.